



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

AT
JH

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/501,600	02/10/00	KOUNO	Y 105398

Oliff & Berridge PLC
P O Box 19928
Alexandria VA 22320

MMC1/1024

EXAMINER

CHANG, A

ART UNIT	PAPER NUMBER
----------	--------------

2872

DATE MAILED: 10/24/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/501,600

Applicant(s)
Kouno

Examiner
Audrey Chang

Group Art Unit
2872



- ☐ Responsive to communication(s) filed on _____.
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 1-6 is/are pending in the application.
- Of the above, claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-6 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claims _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
- ☒ received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☒ Notice of References Cited, PTO-892
- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2872

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2 and 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrases "a plurality of filter layers" recited in claim 2 appears to be vague and indefinite since it fails to give a definite relationship between these layers and the optical filter recited in its based claim. This lacking of structure relationship renders the claim incomplete. Claim 4 inherits the rejection from its base claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claims 1, 3, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by the patent issued to Tsuyuki et al (PN. 6,069,651).

Tsuyuki et al teaches an imaging apparatus for endoscope wherein the imaging apparatus comprises a charge couple device (CCD) (16) serves as the photoelectric conversion device that converts an object

Art Unit: 2872

image formed on the receiving surface of the CCD to an electrical signal. The object image is projected from an endoscope (1), via a lens barrel or an imaging optical system (58 or 6) to the CCD. Tsuyuki et al teaches that a filter unit (59 and 61 or 10) is interposed between the CCD and the lens barrel or the imaging optical system wherein the filter unit are held within a housing or filter frame (65 or 117) serves as the holding member with a stage formed at a portion of an external circumference of the optical filter unit for holding the filter unit, (please see Figures 6-7, 11-12, 13A, 19, 26 and 27, columns 8-9, 10, 12, 16, and 22). This reference has therefore anticipated the claims.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tsuyuki et al in view of the patent issued to Ueda (PN. 5,548,373).

The imaging apparatus for endoscope that is comprised of the optical filter unit taught by Tsuyuki et al as described for claim 1 above has met all the limitations of the claims. With regard to claim 2, Tsuyuki et al teaches that the filter unit (59 and 61) may include a plurality of filter layers including a plurality layers of quartz filter and infrared cut filter, (please see column 8). However this reference does not teach that the filter layers have different sizes that form different stage size. But it is rather well known in the art that the filter layers in the filter unit may either have the same size or different size as desired as demonstrated by the teachings of Ueda wherein the filters (15 and 16) in front of the CCD have different sizes. It would then have

Art Unit: 2872

been obvious to one skilled in the art to modify the size of the filter layers in the filter unit of Tsuyuki et al and accordingly to modify the size of the filter frame or holder and the stage for holding the filter unit in order to provide an alternative arrangement and design to the imaging apparatus.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over the patent issued to Tsuyuki et al in view of the patent issued to Stravitz (PN. 4,302,078).

The imaging apparatus for endoscope that is comprised of the optical filter unit taught by Tsuyuki et al as described for claim 5 above has met all the limitations of the claim. This reference however does not teach explicitly that the filter frame or holder has a spring property that holds the filter unit by pressing the unit. Stravitz in the same field of endeavor teaches a photographic filter holder that has flexible members (9 and 10) that provides resilient constrictions to filter elements inserted in the filter holding slots or channels, (please see Figure 6 column 2). It would then have been obvious to one having ordinary skill in the art to apply the teachings of Stravitz to the filter unit frame or holder of Tsuyuki et al to add this flexible member in order to supply this resilient constriction to the filter layers for the benefit of better securing the filter layers in place and in alignment with the CCD.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent issued to Weng (PN. 6,011,661) discloses an optical holder for an optical apparatus.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Chang whose telephone number is (703) 305-6208.

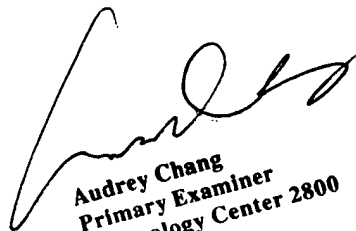
Art Unit: 2872

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

Papers related to this application may be submitted to Group 2800 through facsimile transmission. Papers should be faxed to Group 2800 via PTO Fax Center (fax number 703-308-7722) located in Crystal Plaza 4.

A. Chang

October 20, 2000



Audrey Chang
Primary Examiner
Technology Center 2800